

ABSTRACT OF THE DISCLOSURE

The photovoltaic element of the present invention is a photovoltaic element comprised of a semiconductor-junctioned element, characterized in that the element includes a first electrically conductive type semiconductor layer, a non-crystalline i type semiconductor layer, a microcrystalline i type semiconductor layer and a microcrystalline second electrically conductive type semiconductor layer and is pin-junctioned, and a method of and an apparatus for manufacturing the same are characterized by efficiently and continuously mass-producing the photovoltaic element having an excellent current-voltage characteristic and excellent photoelectric conversion efficiency. Thereby, there are provided a photovoltaic element in which the junction interface between the non-crystalline i type layer and the microcrystalline electrically conductive type layer has good grating consistency and which has an excellent current-voltage characteristic and excellent photoelectric conversion efficiency, and a method of and an apparatus for continuously mass-producing the same.